

IDAHO

DEPARTMENT OF FISH AND GAME

Jerry M. Conley. Director

GRACE HATCHERY

Annual Report



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by

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GRACE HATCHERY

ABSTRACT

Grace Hatchery produced 138,846 pounds, 1,829,292 fish during the year. Species stocked and transferred were rainbow, cutthroat, lake, brown, and Henry's Lake hybrid trout.

We fed 209,000 pounds of fish feed at a cost of \$41,316.18. It took 1.79 pounds of feed to produce each pound of fish. Cost of feed per pound of fish was \$.298.

We trapped 91 adult Bear Lake cutthroat on St. Charles Creek, a tributary to Bear Lake. Heavy runoff made trapping almost impossible this year. Utah's Swan Creek trap was washed out during the runoff.

Extra fingerling Bear Lake cutthroat were received at Grace Hatchery from Utah and Hayspur Hatchery. We hope to improve our trophy fisheries in Blackfoot Reservoir and several other state waters with these fish.

A new 11-ton capacity feed bin was erected. The old water line which feeds our incubator room and nursery vats was replaced with a 12-inch plastic line. A new water wier was installed to give us and our watermaster a reading on the total flow through this hatchery.

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OBJECTIVES

1. To rear 110,000 pounds of trout, mainly rainbow, for five county areas in southeastern Idaho. Streams, rivers, reservoirs and lakes are stocked in Franklin, Bear Lake, Caribou, Oneida and Bingham counties.
2. To rear other species of trout for waters of the state when ample space is available at this station.
3. To operate a fish trap on St. Charles Creek, a tributary to Bear Lake, in cooperation with Utah Division of Wildlife for the purpose of obtaining Bear Lake cutthroat eggs.

INTRODUCTION

Grace Hatchery was constructed in the early 1940's and is located on a small stream known as Whiskey Creek, eight miles south of the small town of Grace, Idaho, in Caribou County, in southeastern Idaho. The hatchery is spring fed and the water is a constant 52° F. year round. Water flows vary from year to year depending on snow pack and irrigation needs.. This year's flows were from a low of 9 cfs to a high of 20 cfs. Water quality is excellent for rearing trout and disease problems are very few.

A large wooden building houses our incubation room and 16 hatchery vats which are used to start the fry. We use 10 stacks of 16-tray Heath incubators and 8 upwelling incubators for egg hatching. This building also contains a feed storage room, a small shop and a walk-in freezer.

We have twelve outside nursery raceways, four are 60 feet by 7 feet, four, 60 feet by 3 feet, and four, 100 feet by 4 feet. Size large raceways, 300 feet by 14 feet, are used to rear the catchable fish for stocking. We can produce 15,000 to 20,000 pounds in each of these six raceways depending upon the water year.

We have housing for three permanent employees, one four-car and one two-car garage, and two small storage buildings. The office building contains a small shop, office, and a small area for housing temporary employees.

FISH PRODUCTION

Eggs received and hatched at this hatchery during the year:

SPECIES	NUMBER OF EGGS	SOURCE
Rainbow Trout	200,825	Aqua-Life Corp.
Rainbow Trout	548,352	Hayspur Hatchery
Fine-spotted Cutthroat Trout	816,584	Auburn Hatchery
Lake Trout	419,175	Jackson Hatchery
Henry's Lake Hybrid Trout	341,682	Henry's Lake
Brown Trout	200,512	Plymouth Rock, Mass.
TOTAL	2,527,130	

FISH TRANSFERS AND STOCKING

The following waters were stocked during the year from Grace Hatchery:

RAINBOW TROUT, 6 INCH OR LARGER

Waters	Pounds	Numbers
Lamont Reservoir	1,000	3,200
Below Oneida Dam	810	2,308
Red Point	350	995
Whiskey Creek	730	2,154
Trout Creek	1,375	3,035
Bridge West of Grace	1,200	3,600
Weston Reservoir	2,850	7,560
Winder Reservoir	1,200	3,840
Johnson Reservoir	3,650	11,950
Foster Reservoir	3,300	9,040
Montpelier Reservoir	4,580	12,277
Bear River (Cove Plant)	1,000	2,900
Treasureton Reservoir	6,500	17,840
Condie Reservoir	6,500	18,280
Montpelier Creek	1,650	4,550
Thomas Fork Creek	400	1,120
Island Park Reservoir	6,300	22,050
St. Charles Creek	1,650	4,540
Bear Lake	1,300	4,160
Cub River	1,700	4,370
Black Canyon (Bear River)	2,800	8,160
Alexander Dam (Bear River)	1,600	4,700
Below Gov't Dam (Blackfoot River)	1,200	3,600
Twin Lakes	5,500	15,600

RAINBOW TROUT, 6 INCH OR LARGER (Continued)

Waters	Pounds	Numbers
Corral Creek	550	1,925
Twenty Four Mile Reservoir	3,300	8,080
Rawlins Creek	1,100	2,970
Last Chance (Bear River)	1,350	3,940
Paris Creek	200	600
Eight Mile Creek	1,200	3,480
Glendale Reservoir	2,400	7,680
Bloomington Creek	800	2,290
Upper Georgetown Creek	400	1,040
Lower Georgetown Creek	400	1,040
Little Valley Reservoir	700	2,960
Dike Lake	2,550	8,160
TOTALS	74,095	215,994

The following rainbow trout, 6 inch or larger, were transferred from Grace:

Waters	Pounds	Numbers
Grace to Clark Fork Hatchery	2,900	7,830
Grace to Hagerman Hatchery	<u>12,600</u>	<u>42,420</u>
TOTALS	15,500	50,250

This is a grand total of 89,595 pounds, 266,244 6-inch or larger rainbow trout stocked and transferred from Grace during the year.

RAINBOW TROUT, 3 to 6 INCH

Waters	Pounds	Numbers
Blackfoot Reservoir	8,150	282,135
Springfield Lake	1,600	51,200
Montpelier Creek (Rearing Pond)	<u>170</u>	<u>5,015</u>
TOTALS	9,920	338,350

FINE-SPOTTED CUTTHROAT TROUT, 6 INCH OR LARGER

Waters	Pounds	Numbers
Blackfoot Reservoir	19,075	57,225
Rainey Creek	<u>2,000</u>	<u>21,600</u>
TOTALS	21,075	78,825

FINE-SPOTTED CUTTHROAT TROUT, 3 to 6 INCH

Waters	Pounds	Numbers
Blackfoot Reservoir	680	15,980
Pearl Creek	100	4,000
Bloomington Lake (Horse Plant)	300	12,000
Tin Cup Creek	450	18,135
Rainey Creek	400	33,600
Burns Creek	<u>800</u>	<u>67,200</u>
SUBTOTALS	2,730	150,915
Transferred from Grace Hatchery to Hagerman Hatchery	<u>1,700</u>	<u>133,450</u>
TOTALS	4,430	284,365

FINE-SPOTTED CUTTHROAT TROUT, 0 to 3 INCH

Waters	Pounds	Numbers
Transferred from Grace Hatchery to Hagerman Hatchery	981	<u>302,148</u>

LAKE TROUT, 6 INCH OR LARGER

Waters	Pounds	Numbers
Bear Lake	6,200	50,710
Payette Lake	<u>4,550</u>	<u>36,400</u>
TOTALS	10,750	87,110

LAKE TROUT, 0 to 3 INCH

Waters	Pounds	Numbers
Bear Lake	360	79,920
Payette Lake	350	48,300
Warm Lake	<u>225</u>	<u>31,050</u>
TOTALS	935	159,270

HENRY'S LAKE HYBRID TROUT

Waters	Pounds	Numbers
Henry's Lake	1,000	234,900

BROWN TROUT, 0 to 3 INCH

Waters	Pounds	Numbers
Grace Hatchery to Hagerman Hatchery	160	78,080

Total fish planted and transferred this year was 138,846 pounds, 1,829,292 fish.

We received 258 pounds, 213,882 fish from Utah. These fish are Bear Lake cutthroat and we hope to improve our Blackfoot Reservoir fisheries with these fish. Hayspur Hatchery sent us 470 pounds, 180,740 of these same fish that they received as eggs from Utah. These fish were excess from Utah and we will hold them until next spring for stocking in area waters.

FISH FEED SUMMARY

Fish feed consumed by Grace Hatchery fish during the year:

Feed Size	Pounds	Cost
Starter, dry	350	\$ 103.55
No. 1	2,100	590.65
No. 2	2,550	714.07
No. 3	2,650	666.78
No. 4	6,050	1,295.24
No. 5	20,850	4,073.67
3/32 Pellet	109,260	21,842.51
4/32 Pellet	61,690	11,053.11
5/32 Pellet	2,000	416.60
Moist Feed (OMP)	1,500	560.00
TOTALS	209,000	\$41,316.18

This calculates out to 1.79 pounds of feed to produce each pound of fish flesh. Cost of feed per pound of fish was \$.298.

Feed was purchased from Rangen, Murry Elevators, Moore-Clark and Clear Springs.

FISH HEALTH

We had several minor outbreaks of bacterial gill disease at the station during the year. Purina 4X was used at one ounce per cfs administered in a one-hour drip through the raceway.

The Bear Lake cutthroat were also treated with Purina 4X as a protection against any diseases that may have come in from Utah.

SPAWNTAKING OPERATION

At our St. Charles Creek trap, adult Bear Lake cutthroat trout are trapped during the spring and taken to Utah's Swan Creek trap for spawning. Utah Division of Wildlife Resources personnel spawn these adults, return them to the lake and send the eggs to Mantua Hatchery for rearing. After growing to a length of seven to nine inches, these fish are planted into Bear Lake. The purpose of this joint effort with Utah is to enhance the Bear Lake cutthroat trout fishery and to ensure the future of this species.

Kenneth Taylor operated the fish trap at St. Charles Creek from May 3, to June 8, 1982. A total of 91 fish were trapped, 41 males and 50 females. We transported 78 cutthroat, 38 males and 40 females to Utah's Swan Creek trap for spawning. Thirteen cutthroat escaped from the trap and went upstream.

High water conditions,. due to heavy snowpack, caused us problems at the trap site. We could not hold fish, as water was over our pickets, and therefore, an undisclosed number of fish went upstream. Swan Creek trap in Utah washed out and they lost their trapping capabilities early in the season.

HATCHERY IMPROVEMENTS

The construction crew installed a new plastic 12-inch water line from our spring into the main hatchery building. The old line rusted through and was not repairable. New 8-inch lines, which feed our 16 nursery vats and incubator room, were installed in hatchery building.

The crew also put up a new 11-ton capacity feed bin during the year. This increases our feed capacity and will help during the winter months.

A new water weir was installed at the outlet of our settling pond. We are now able to read a total water flow through the hatchery and this also satisfies our area watermaster.

The hatchery crew put up a loft. x loft. metal building by the four new raceways for storage of feed and other equipment.

The outside nursery raceways had the walls capped during the summer. They were deteriorating very badly.

PUBLIC RELATIONS

Approximately 6,000 visitors and fishermen toured the facility during the year. We also had several school classes and boy scout groups come through the station.

RECOMMENDATIONS

Remove fill around our six large raceways and cap the raceway walls. They are beginning to deteriorate badly from freezing and thawing.

Paint the roof on the main hatchery building. The roof may have to be replaced in the near future.

Build an addition onto residence number 2. This home is too small for anyone with children.

ACKNOWLEDGEMENTS

Hatchery staff during the fish year included:

Jerry Mowery, Fish Hatchery Superintendent II; Paul Smith, Fish Hatchery Superintendent I; Dan Beers, Fish Hatchery Superintendent I; Richard Holman, Fish Culturist; Tom Frew, Fish Culturist; Kenneth Taylor, Bio-aide; and Sherry McCurdy, CETA.